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(12) (19) (CA) **Demande-Application**

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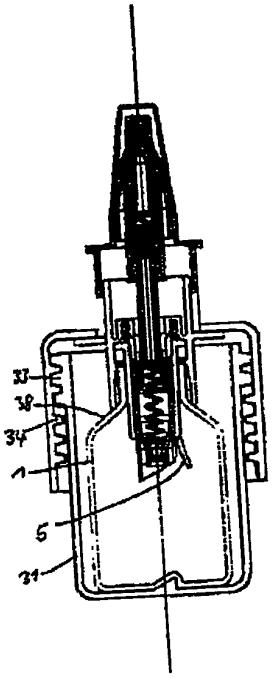
(54) **CONTENANT COMPRENANT UNE POMPE**
(54) **CONTAINER COMPRISING A PUMP**




(57) Dans le col du récipient (1) est placé un insert (3) étanche présentant un fond (5) qui est fermé à l'état initial et qui, avant la mise en marche d'un système de pompe s'engageant par son extrémité dans l'insert (3), s'ouvre du fait qu'une pièce du corps de pompe (6) est vissée vers l'avant dans le sens axial du récipient (1). Entre le fond de l'insert et le système de pompe se trouve la chambre d'admission de l'agent active qui se mélange après ouverture du fond (5) avec un liquide se trouvant dans le récipient. On peut ainsi délivrer avec une pompe à vide, après un long temps de conservation, un médicament liquide comprenant un agent actif à stabilité de courte durée.

(57) The bottle neck (5) has a sealing insert (3) with a bottom (5) which is closed in the initial state and which, prior to activating a pumping system engaging by its terminal portion into said insert (3), opens as a result of a pump casing part being screwed forward in the axial direction of the container (1). A receiving chamber is provided between the insert bottom and the pumping system for receiving an active blending which, once the bottom is open (5), is mixed with a liquid located in the container. It is thus possible to deliver with a vacuum pump, after a long conservation period, a liquid drug containing an active agent that cannot remain stable during a long time.

Abstract

The neck of the container has arranged therein a tightly fitting insert comprising a bottom which is closed in an initial state and which, prior to the activation of a pumping means engaging with its end section into the insert, is opened in that a housing part of the pumping means is screwed forwardly in the axial direction of the container. The bottom of the insert and the pumping means have provided thereinbetween a receiving chamber for an active substance which, after the bottom has been opened, is mixed with a liquid contained in the container. A liquid drug containing an active substance which has no long-time stability can thus be discharged with a vacuum pump after a long storage period.

Patent Claims

1. A container the opening of which has arranged therein a pumping means for discharging a liquid container content, with a substantially tubular insert (3) tightly resting on the inner wall of the opening (2) of the container and comprising a bottom (5) that is closed in an initial state and is opened prior to the activation of the pumping means (6) by advancing a front suction section of the pumping means (6) which engages into the insert (3) and tightly rests on the inner wall of the insert (3) with its circumferential wall (27),
characterized in
that a receiving chamber (15) for an active substance which is separated from the liquid container content prior to the opening of the bottom and enters thereinto after opening is located inside the insert (3) above the bottom thereof (5).

2. The container comprising the pumping means according to claim 1, characterized in that the bottom (5) of the insert (3) comprises a surrounding groove (30).

3. The container comprising a pumping means according to claim 1 or 2, characterized in that the circumferential wall (27) of the end section of the pumping means (6) comprises a tubular projection (28) which is in alignment with the groove (30) of the bottom (5) and is obliquely cut away.

4. The container comprising a pumping means according to any one of claims 1 to 3, characterized in that the container (1) is provided on its outside with an additional circumferential wall (16) which forms part of an outer cap (16) which encloses at least the lower portion of the container (1), and that a housing part (23) of the pumping means (6) is in axially displaceable engagement with the circumferential wall (16).

(23) of the pumping means (6) is in axially displaceable engagement with the circumferential wall (16).

5. The container comprising a pumping means according to claim 4, characterized in that the outer cap (16) is provided on its upper edge with an outwardly projecting annular shoulder (18) and the housing part (23) is provided on its lower edge with an inwardly projecting annular shoulder (25).

6. The container comprising a pumping means according to claim 5, characterized in that the annular shoulder (17) of the outer cap (16) or the annular shoulder (25) of the housing part (23) is slightly overdimensioned radially so that it rests under a preload on the wall of the housing part (23) or the outer cap (16), the latter being provided at an axial distance from its annular shoulder with a surrounding groove (27) for locking the other annular shoulder in place.

7. The container comprising a pumping means according to any one of claims 1 to 6, characterized in that the container (1) is arranged in an outer cap (31) which is provided with a thread (34) and with which a housing part (35) of the pumping means (6) is in threaded engagement.

8. The container comprising a pumping means according to claim 7, characterized in that the thread (33, 34) of the outer cap (31) and of the housing (35) is self-locking in the forwardly screwed end position.

9. The container comprising a pumping means according to claim 7 or 8, characterized in that the container (1) is seated in the outer cap (31) for rotation therewith.

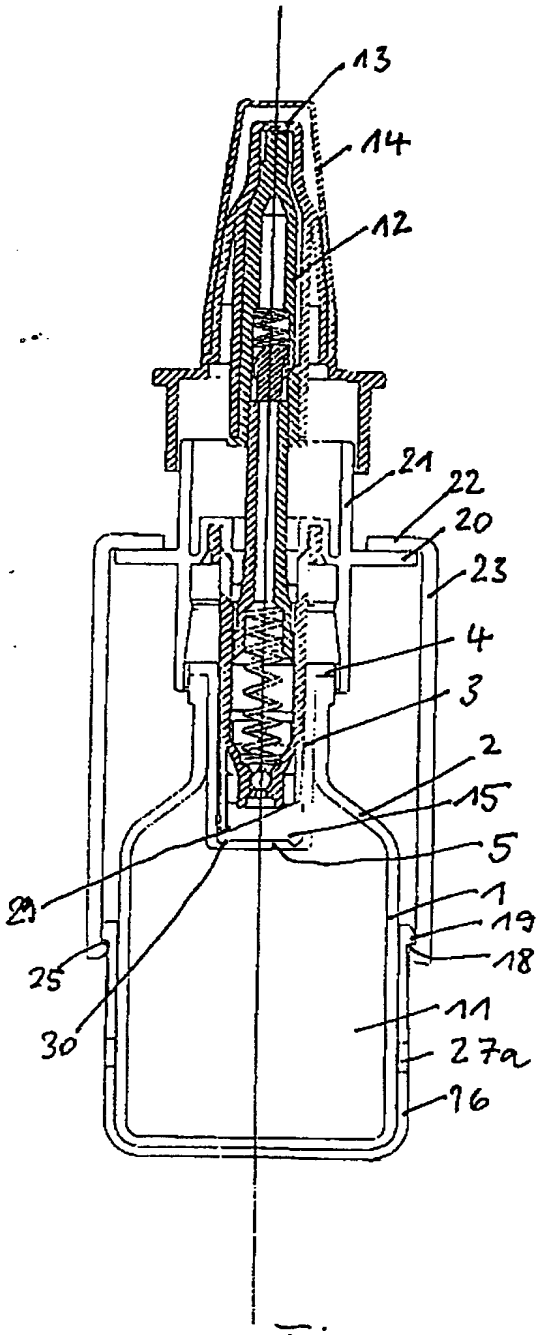

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Fig.1

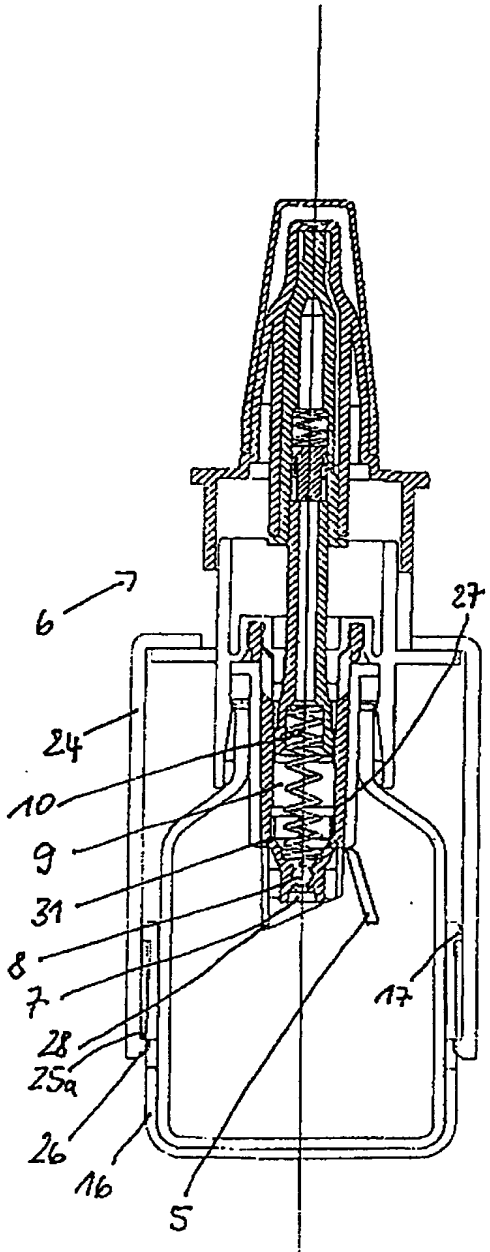
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Fig.2

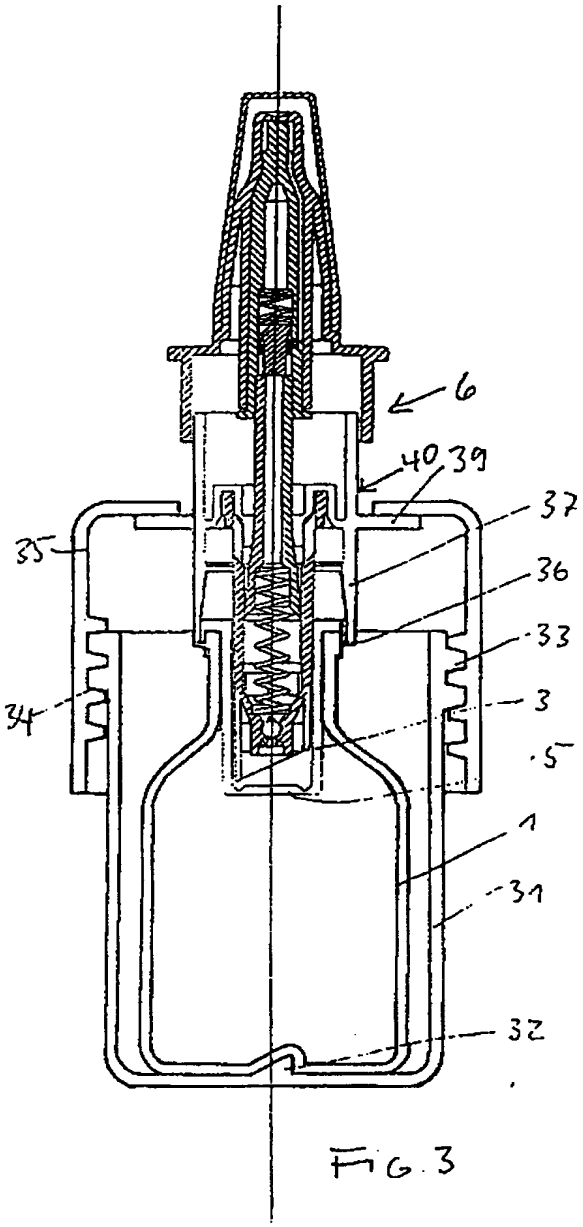


Fig.3

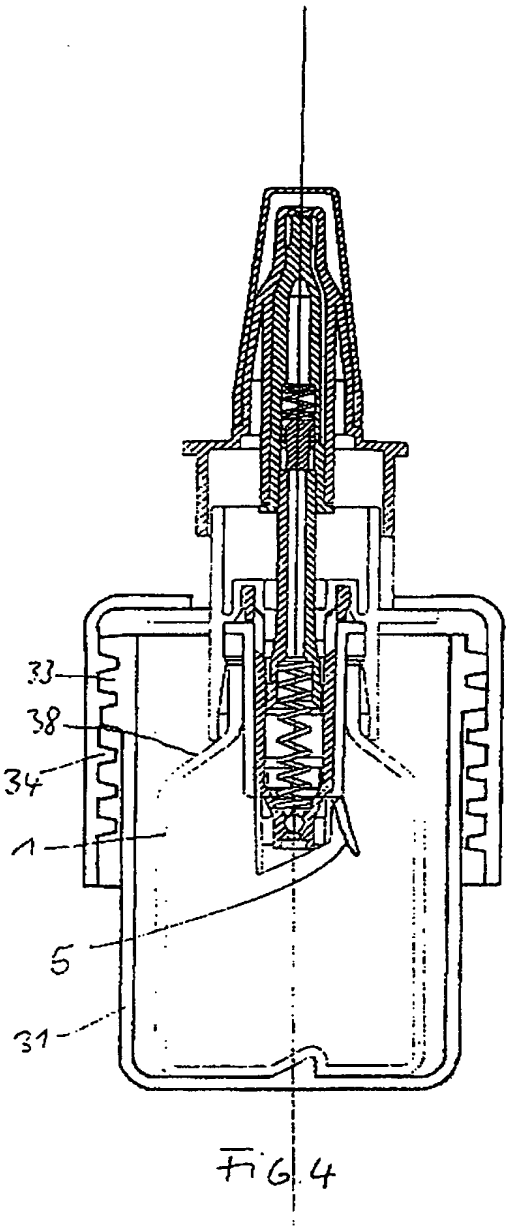


Fig.4